

**POLICY OF THE
IOWA DEPARTMENT OF TRANSPORTATION
MAINTENANCE DIVISION**

**FOR ACCOMMODATING
UTILITIES ON THE
PRIMARY ROAD SYSTEM**

REVISED AND IMPLEMENTED MAY, 1992

**IN ACCORD WITH
IOWA ADMINISTRATIVE CODE 761-
CHAPTER 115 (306A)**



TABLE OF CONTENTS

115.1	Statement of policy	1
115.2	Definitions	1
115.3	RESERVED.....	4
115.4	General provisions for occupancy of the right-of-way	4
115.4(1)	Permit.....	4
115.4(2)	Assurance of compliance	4
115.4(3)	No adverse effect on highway	4
115.4(4)	Minimal hazards to highway user	4
115.4(5)	Protection of landscaped and planted areas	5
115.4(6)	Notice by department.....	5
115.4(7)	Noncompliance	5
115.4(8)	Private utility facility	5
115.5	General design provisions.....	5
115.5(1)	Responsibilities	5
115.5(2)	Plans	5
115.5(3)	Materials	5
115.5(4)	Ground-mounted facilities.....	6
115.6	Access to utility facilities.....	6
115.6(1)	Freeways	6
115.6(2)	Nonfreeway highways.....	6
115.7	Clear zone requirements	6
115.7(1)	Freeways	6
115.7(2)	Nonfreeway highways.....	6
115.8	Scenic enhancement	8
115.8(1)	Underground installations	8
115.8(2)	Overhead installations	8
115.9	Costs and liability	8
115.9(1)	Costs of relocation	8
115.9(2)	Liability	8
115.10	Utility accommodation permit	9
115.10(1)	Application for permit	9
115.10(2)	Plan.....	9
115.10(3)	Waterways	10
115.10(4)	Department action on permit application	10
115.10(5)	Approvals required	10
115.10(6)	Permit.....	10
115.10(7)	New permit required.....	10
115.10(8)	Expiration of certain permits	11
115.10(9)	Copy at job site.....	11
115.10(10)	Transfer of permit	11

115.11	Traffic protection	11
115.11(1)	Signs furnished	11
115.11(2)	Traffic control for all work	12
115.11(3)	Traffic control for construction and maintenance work	12
115.11(4)	Traffic control for emergency work	13
115.12	General construction and maintenance responsibilities and procedures	13
115.12(1)	Execution of work	13
115.12(2)	Disturbance of other contractors	13
115.12(3)	Protection of landscaped and planted areas	13
115.12(4)	Safety, health and sanitation	13
115.12(5)	Clear zone	14
115.12(6)	Underground transverse crossings	14
115.12(7)	Clear zone for jacking pits	14
115.13	Construction responsibilities and procedures	14
115.13(1)	Notice of construction	14
115.13(2)	Relocation	14
115.13(3)	Authority of engineer	15
115.13(4)	Authority to inspect and approve	15
115.13(5)	Department inspectors	15
115.13(6)	Work in progress	15
115.13(7)	Repair and clean-up	15
115.13(8)	Final inspection	16
115.13(9)	Procedures for backfilling trenched construction and jacking or boring pits	16
115.13(10)	Procedures for untrenched construction	16
115.13(11)	Procedures for pavement removal	16
115.13(12)	Procedures for pavement replacement	17
115.14	Maintenance responsibilities and procedures	17
115.14(1)	General	17
115.14(2)	Freeways--notice required	17
115.14(3)	Nonfreeway highways--notice required	17
115.14(4)	Utility emergency maintenance activities	18
115.14(5)	Department emergency maintenance activities	18
115.15 to 115.19	RESERVED	18
115.20	General requirements for transverse utility facility occupancy	18
115.20(1)	Number of crossings	18
115.20(2)	Underground installations	18
115.21	Transverse utility facility occupancy of freeways	18
115.21(1)	General	19
115.21(2)	Overhead installations	19
115.22	Transverse utility facility occupancy of nonfreeway highways	19
115.22(1)	Underground installations	19
115.22(2)	Overhead installations	19

115.23	General requirements for longitudinal utility facility occupancy	20
115.23(1)	Uniform alignment	20
115.24	Longitudinal utility facility occupancy of freeways	20
115.24(1)	Type of installation permitted	21
115.24(2)	General prohibitions	21
115.24(3)	Minimal maintenance	21
115.24(4)	Location and depth	21
115.24(5)	Access to facility	21
115.24(6)	Clear zone	21
115.24(7)	Aboveground installations (identification signs, pedestals	21
	repeater stations)	
115.24(8)	Metallic warning tape.....	22
115.24(9)	Engineering	22
115.24(10)	Traffic control.....	22
115.24(11)	Multi-duct system	22
115.24(12)	Occupancy fees	23
115.24(13)	Performance bond.....	24
115.24(14)	Insurance	25
115.24(15)	Future relocation	25
115.24(16)	Liability	25
115.24(17)	Permit.....	25
115.24(18)	Utility attachments to border bridges	25
115.24(19)	Existing facilities	26
115.24(20)	Utilities for highway facilities	26
115.25	Longitudinal occupancy of nonfreeway highways.....	26
115.25(1)	Underground installations	26
115.25(2)	Overhead installations	26
115.26	Vertical overhead clearance requirements	27
115.27	Underground depth requirements	27
115.27(1)	Measurement of cover	27
115.27(2)	Minimum cover--roadway	28
115.27(3)	Minimum cover--other portions of the right-of-way	28
115.28	Location of appurtenances.....	28
115.28(1)	Freeways	28
115.28(2)	Nonfreeway highways--rural type.....	28
115.28(3)	Nonfreeway highways--urban type	28
115.29	RESERVED	

115.30	General requirements for encasement of underground utility facilities	28
115.30(1)	Casing	28
115.30(2)	Appurtenances	29
115.30(3)	Seals	29
115.30(4)	Transverse occupancy	29
115.30(5)	Longitudinal occupancy	29
115.31	Encasement requirements for transverse occupancy of freeways	29
115.32	Encasement requirements for transverse occupancy of	29
	nonfreeway highways	
115.32(1)	Electrical service	29
115.32(2)	Pipelines	29
115.32(3)	Communication cables	30
115.32(4)	Sanitary sewer lines	30
115.32(5)	Water lines	31
115.32(6)	Installations vulnerable to damage	31
115.32(7)	Other installations	31
115.33	Boring requirements	31
115.33(1)	Clear zone for pits	31
115.33(2)	Construction methods	31
115.34	Encasement material	32
115.34(1)	Welded steel pipe	32
115.34(2)	Cast iron or ductile iron pipe	32
115.34(3)	PVC or CPVC pipe	32
115.34(4)	PE pipe	32
115.34(5)	Reinforced concrete pipe	33
115.34(6)	Electric conduit	33
115.35-115.39	RESERVED	33
115.40	Utility facility attachments to bridges	33
115.40(1)	Electrical power and communication cable attachments	33
115.40(2)	Pipeline attachments	34
115.40(3)	Attachment fee	35
114.40(4)	Engineering fee	35

b. Reserved.

115.22(2) Overhead installations. Overhead installations shall comply with the following:

- a. In rural areas with rural-type roadways, poles, guys and other supporting structures and related ground-mounted facilities shall be located as near to the right-of-way line as possible.
 - (1) These aboveground obstructions shall be located in an area beyond the clear zone or the roadway foreslope, whichever locates the obstruction a greater distance from the edge of the traveled way, right-of-way width permitting.
 - (2) Self-supporting poles or towers, double arming and insulators, and dead-end construction should be considered.
- b. In suburban areas with rural-type roadways and speed limits of 45 miles per hour or lower, utility poles shall be located at least 15 feet from the edge of the paved traveled way or beyond the roadway foreslope, whichever is greater, with the preferred location being near the right-of-way line.
- c. On urban-type roadways, utility poles shall be placed at the right-of-way line, but no closer than 10 feet from the back of the curb. Exceptions to this requirement shall be considered on an individual basis. In general, ground anchors or stub poles shall not be placed between a pole and the pavement.
- d. Poles, guys, anchors and other appurtenances shall not be located in ditches, at drainage structure openings or on roadway shoulders. All poles, guys, anchors and other appurtenances shall be located to minimize interference with the maintenance operations of the department.
- e. The engineer may approve the adjustment of minimum setback distances for poles and other appurtenances if they meet minimum AASHTO breakaway criteria.

761—115.23(306A) GENERAL REQUIREMENTS FOR LONGITUDINAL UTILITY FACILITY OCCUPANCY.

115.23(1) Uniform alignment. Longitudinal utility facility installations should be located on uniform alignment as near as practicable to the right-of-way line so as to provide a safe environment for traffic operations and to preserve space for future highway improvements and other utility installations.

115.23(2) Reserved.

761—115.24(306A) LONGITUDINAL UTILITY FACILITY OCCUPANCY OF FREEWAYS.

The requirements for longitudinal utility facility occupancy of the right-of-way of freeways are as follows:

115.24(1) Type of installation permitted. Underground utility facilities installed in compliance with this rule are permissible. Except as provided in this rule, no aboveground installations other than those needed to serve highway facilities are permitted.

115.24(2) General prohibitions.

- a. The facility shall not adversely affect the safety, design, construction, operation, maintenance or stability of the present use or future expansion of the freeway.
- b. The facility shall not be used for transmitting gases or liquids or for transmitting products that are flammable, corrosive, expansive, highly energized or unstable.
- c. The facility shall not present a hazard to life, health or property if it fails to function properly, is severed or is otherwise damaged.
- d. No direct service connection to adjacent properties is permitted.
- e. No utility facility is permitted in or on a structure carrying a freeway roadway or ramp, except as provided in subrule 115.24(18).

115.24(3) Minimal maintenance. Once installed, the facility shall require minimal maintenance.

115.24(4) Location and depth. The facility shall be located on uniform alignment, preferably within eight feet of the freeway right-of-way line, and at a location approved by the department. The facility shall be installed at a minimum depth of 36 inches.

- a. The department reserves the right to waive the minimum depth of installation where rocky terrain makes it difficult to obtain the desired depth. The department shall determine the minimum depth in these situations; however, no installation shall be authorized with less than 24 inches of cover.
- b. Except for multiduct systems and isolated locations as determined by the department, cable shall be installed by the plowing method only. Borings, as necessitated at public road intersections, stream crossings and railroad crossings, shall be in compliance with rule 115.33(306A).
- c. Utility access holes and splice boxes may be placed below the existing ground line. The location and number of installations are subject to department approval.

115.24(5) Access to facility. Access to the facility shall be obtained from other than the freeway or its ramps. See subrule 115.6(1).

115.24(6) Clear zone. See rule 115.7(306A).

115.24(7) Aboveground installations.

- a. Identification signs shall be placed by the utility facility owner within 12 inches of the right-of-way fence, at the line of sight, along the entire

occupancy route. These signs shall identify the owner/operator's name, telephone number to contact in case of an emergency, and type of buried utility.

- (1) The signs shall be composed of an ultraviolet-resistant material.
- (2) The signs shall be no larger than 200 square inches each.
- (3) The interval between signs shall be no more than one-quarter mile in rural areas and 500 feet in urban areas.
- (4) Additional signs shall be placed on each side of public roads and streets intersecting or crossing the freeway at points where the freeway right-of-way line intersects the public road or street right-of-way line.
- (5) The utility facility owner is responsible for the installation and maintenance of the signs.

b. Pedestals may be placed within six inches of the right-of-way fence. The number of installations is subject to department approval.

c. Repeater stations shall be placed outside the right-of-way line.

115.24(8) Metallic warning tape. Metallic warning tape shall be installed a minimum of 12 inches below the existing grade and above the utility installation to facilitate future locating.

115.24(9) Engineering. The utility facility owner shall retain the services of a qualified engineering firm.

- a. The firm is responsible for overseeing continuous on-site inspection of the installation of the facility including all provisions pertaining to access to the work site and traffic control.
- b. Upon completion of the project, a registered engineer of the engineering firm shall certify to the department on the appropriate forms that the installation, traffic control, and access to the work site were accomplished in accordance with the permit.
- c. Any changes in the original alignment as approved by the department shall require prior approval of the department and the submission of as-built plans.

115.24(10) Traffic control. See rule 115.11(306A).

115.24(11) Multiduct system. The department reserves the right to require facilities to be installed within a multiduct system to be shared with others. A multiduct system consists of two or more ducts as determined by the department. Details of the installation are subject to department approval.

- a. A multiduct system is required for all occupancies located in the following areas:

ROUTE	LOCATION
I-29	I-80 to 16th Avenue in Council Bluffs
I-29	Big Sioux River to Sergeant Bluff/Airport Interchange in Sioux City
I-80	Missouri River to Madison Avenue in Council Bluffs
I-35/80	W. Jct. of I-235 to E. Jct. of I-235
I-235	Entire Route in and near Des Moines
I-80	I-280 Interchange to Mississippi River Bridge in Scott County
I-80	Iowa 965 to Iowa 1 in Iowa City
I-74	Entire Route in Scott County
I-280	Entire Route in Scott County
I-380	Gilbertville Interchange Westerly to End of Route
I-380	U.S. 30 to Boysen Road in Cedar Rapids
U.S. 30	Fairfax Road to "C" Street in Cedar Rapids
U.S. 20	Iowa 58 to I-380 in Waterloo/Cedar Falls Area
U.S. 20	I-29 to Iowa 12 Interchange in Sioux City
U.S. 61	Locust Street Connection to City Island Bridge in Dubuque
U.S. 218	11th Street to Airport Interchange in Waterloo

- b. The department may designate the first utility facility owner requesting occupancy as the "lead company." The lead company is responsible for:
- (1) Design and construction of the multiduct system.
 - (2) Maintenance of the multiduct system.
 - (3) Providing all capital required to construct the multiduct system.
- c. Once a multiduct system has been established, the department shall require future longitudinal facility occupancies to be located within one of the unoccupied inner ducts of the system. If all inner ducts are occupied, the department may require the establishment of an additional multiduct system.
- d. Each occupant of a multiduct system shall share equally in the entire capital costs of the facility. As each new occupant is added to an existing system, the new occupant shall be required to pay its proportionate share based on the number of inner ducts it occupies.

115.24(12) Occupancy fees. The utility facility owner shall pay to the department an annual fee for longitudinal occupancy of the right-of-way. The initial fee is due before any construction work commences within the right-of-way.

- a. Unless otherwise specified, the annual fee shall be as follows:

- (1) Urban areas (those locations listed in 115.24(11)"a"): Flat fee of \$9,000 per cable installation, or \$4,500 per cable mile of occupancy, whichever is greater.

(2) Rural areas (all other locations): Flat fee of \$7,500 per cable installation, or \$1,500 per cable mile of occupancy, whichever is greater.

- b. When the department requires the installation of a multiduct system, the department reserves the right to negotiate an agreement with the lead company for a discounted fee payment schedule until the lead company has recovered all or an agreed upon portion of the cost of placing the system. Subsequent occupants of the multiduct system shall be required to pay the full annual fee as established in paragraph "a".
- c. The department reserves the right to negotiate an annual fee for an occupancy dedicated solely to state governmental use. If a multiduct system has been established and at least one inner duct is unoccupied, the department shall require the facility to be installed within the multiduct system.
- d. Every fifth year from the effective date of this subrule, the department shall review the established fees for possible adjustment. Any change in the fee structure shall be noted in all existing permits when the next annual fee is payable.

115.24(13) Performance bond. The utility facility owner shall file a performance bond with the department prior to commencing work within the freeway right-of-way.

- a. The bond shall be in the amount of \$100,000 per permit and shall guarantee prompt restoration of any damage caused during the installation of the utility facility.
- b. Upon completion of the project, certification as required in subrule 115.24(9), and acceptance of the project by the department, the performance bond shall be released.

115.24(14) Insurance.

- a. The utility facility owner shall maintain the following insurance for bodily injury, death and property damage arising out of or in connection with the construction, maintenance and operation of the facility:
 - (1) General public liability insurance with limits of not less than \$500,000 for injury or death of a single person, or not less than \$1,000,000 for any one accident, and not less than \$250,000 per accident for property damage.
 - (2) Comprehensive automobile liability insurance with limits of not less than \$500,000 for injury or death of a single person, or not less than \$1,000,000 for any one accident, and not less than \$250,000 per accident for property damage.
 - (3) Excess liability coverage with limits of not less than \$5,000,000.
 - (4) Statutory workers' compensation coverage.

- b. This insurance shall be in effect prior to commencing any work within the freeway right-of-way.
- c. Coverage may be provided by blanket policies of insurance covering other property or risks.
- d. The department shall be named as an additional insured in the general public liability and excess liability insurance policies.

115.24(15) Future relocation.

- a. The utility facility owner shall agree to waive all future rights to be reimbursed for relocation costs incurred should maintenance or construction of the freeway system require relocation of the utility facility.
- b. Should relocation of the utility facility be required, the department makes no assurance nor assumes any liability to the utility facility owner that the facility will again be allowed to occupy the freeway right-of-way.

115.24(16) Liability. The utility facility owner shall agree to the liability statements found in subrule 115.9(2).

115.24(17) Permit.

- a. The utility facility owner shall not commence work within the right-of-way until it receives the approved permit from the department.
- b. The term of the permit shall not exceed 20 years. Upon expiration, it may be extended in writing or renegotiated.

115.24(18) Utility attachments to border bridges. Occupancy may be permitted for utility attachments to existing or planned border bridges when the adjoining state's highway agency requests the department to approve the request. The department's approval is subject to the following:

- a. The facility shall not be used for transmitting gases or liquids or for transmitting products that are flammable, corrosive, expansive or highly energized or unstable.
- b. The facility shall not present a hazard to life, health or property if it fails to function properly, is severed or is otherwise damaged.
- c. Except for communication cable, the facility shall exit the freeway right-of-way as soon as physically possible after crossing the state line into Iowa.
- d. Occupancy is subject to receipt of the attachment and engineering fees specified in rule 115.40(306A) and the occupancy fee specified in subrule 115.24(12).
- e. All other applicable provisions of this chapter shall be adhered to.

115.24(19) Existing facilities.

- a. A utility facility occupying land that subsequently becomes freeway right-of-way may remain within the right-of-way if the facility:
 - (1) Can be accessed from other than the freeway or its ramps.
 - (2) Does not adversely affect the safety, design, construction operation, maintenance or stability of the freeway.
- b. If these conditions are not met, the facility shall be relocated.

115.24(20) Utilities for highway facilities. Longitudinal occupancy of utility facilities that service highway-related facilities are permissible upon such terms and conditions as the department may determine.

761--115.25(306A) LONGITUDINAL OCCUPANCY OF NONFREEWAY HIGHWAYS.

The requirements for longitudinal utility facility occupancy of the right-of-way of nonfreeway highways are as follows:

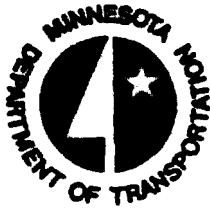
115.25(1) Underground installations. Underground installations shall comply with the following:

- a. With the exception of natural gas lines with an operating pressure of 150 pounds per square inch or less, no carriers of transmittants that are flammable, corrosive, expansive or unstable shall be placed longitudinally within the right-of-way.
- b. On rural-type roadways, utility facilities shall be located in an area beyond the roadway foreslope, right-of-way width permitting, except at locations where this is not acceptable, such as deep ravines or ditches. A determination as to what is acceptable in these situations shall be made by the engineer.
- c. On urban-type roadways, utility facilities shall be located as near to the highway right-of-way line as possible and preferably not within the traveled way. Utility access holes placed within the right-of-way shall not protrude above the surrounding surface.
- d. In general, utility facilities are not permitted in the median. However, in special cases an exception may be approved by the engineer.

115.25(2) Overhead installations. Overhead installations shall comply with the following:

- a. In rural areas with rural-type roadways, poles, guys and other supporting structures and related ground-mounted facilities shall be located as near to the right-of-way line as possible.

E X H I B I T 7



Mn/DOT POLICY GUIDELINE

Date: July 27, 1990

Reference: Highways No. 90-1-G-1
Permits for Accommodation
of Utilities on Highway Right
of Way

Guideline:

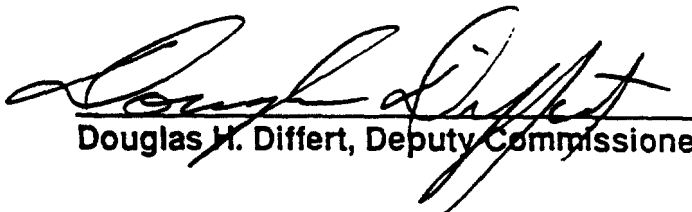
Under Minnesota law and rules it is necessary to obtain a utility permit in order to place utilities on Minnesota trunk highway right of way. Examples of utilities contemplated in Minnesota law are: electric transmission, telephone or telegraph lines, pole lines, community antenna television lines, railways, ditches, sewers, water, heat or gas mains, gas and other pipe lines, flumes, or other structures which, under the laws of Minnesota or the ordinance of any city, may be constructed, placed, or maintained across or along any trunk highway, or its right of way. Permits issued by the Minnesota Department of Transportation contain a copy of the current rules under which it is issued. The Procedures which follow supplement these rules and provide internal guidance for Minnesota Department of Transportation employees when reviewing permit applications.

Position Statement Reference:

Highways No. 90-1

Background:

Through the *Code of Federal Regulations* (CFR, Part 645.215 (A)), the U.S. Department of Transportation requires each State to submit a statement to its Division Administrator on the authority of State to regulate such use, and the policies the State employs or proposes to employ for accommodating utilities within the right of way of any highway project receiving federal aid. Position Statement No. 90-1, and the Guidelines and Procedures adopted thereunder form the basis of this submittal.



Douglas H. Differt, Deputy Commissioner

Any questions regarding this guideline should be directed to:

Robert H. Cartford, Director of Pre-Letting Services, Office of Technical Support, Technical Services Division, 716 Transportation Building, St. Paul, MN 55155. Phone: (612) 296-3268.

**MINNESOTA DEPARTMENT OF TRANSPORTATION
PROCEDURES FOR
ACCOMMODATION OF UTILITIES ON
HIGHWAY RIGHT OF WAY**

Issued under: Mn/DOT Policy Position Statement - Highway No. 90-1
Mn/DOT Policy Guideline - Highway No. 90-1

	Page No.
I. Definitions	1
II. Application	4
III. Permit.....	5
Federal agency review	5
Application.....	6
Plan review	7
Certification	7
IV. Design, General	7
Electric power and communication facilities.....	7
Water lines.....	7
Pressure pipelines.....	7
Liquid petroleum pipelines.....	7
Hazardous materials.....	7
Encasement of pressure pipes.....	8
Trenching of pipelines.....	8
Crossing installations.....	8
Gravity systems.....	8
Recommended boring specifications.....	8
Table 1: Casing pipe wall thickness.....	8
Scenic quality.....	9
Traffic plan.....	9
Specimen trees.....	9
Table 2: Tree protection criteria.....	9
V. Location, General.....	10
VI. Location, Freeways; Longitudinal Occupancy.....	10
VII. Lighting and Other Above Ground Structures.....	15
VIII. Utilities on Highway Bridge Structures.....	15
IX. Scenic Enhancement.....	16
Appendix A: Metro Area Freeway Locations.....	18
Appendix B: Rural Area Freeway Locations.....	21

In lieu of boring (tunnelling), the applicant may re-route underground utility lines to avoid damage to specimen trees.

SECTION V. LOCATION, GENERAL

Utility lines should be located to minimize the need for later adjustment to accommodate future highway improvements, and to permit access for servicing lines with a minimum of interference to highway traffic.

Longitudinal installations should be located on uniform alignment, with pole lines placed in the outer five feet next to the right of way line. Underground facilities, such as power cable and telephone cable, should be in the outer ten feet and distribution gas mains should be parallel and adjacent to these facilities. Other locations may be approved where particular circumstances warrant. The department has no objection to the joint use of pole lines or of common trenching, or plowing, of underground facilities. The installation, however, should be so placed that all servicing may be done with the minimum of disturbance to traffic (except for freeways as described in AASHTO Policy).

All utility crossings of the highway should be normal (perpendicular) to the highway alignment, where practicable.

The horizontal and vertical location of utility lines within the highway right of way shall conform with the clear roadside policy (clear zone) applicable to the type of highway and the specific conditions of highway section involved.

The clear roadside policy is the policy employed by the highway authority to increase safety, improve traffic operations, and enhance the appearance of highways by designing, constructing, and maintaining highway roadsides as wide, flat, rounded and as free, as practical, from physical obstructions above ground; such as from trees, drainage structures, massive sign supports, utility poles, and other ground-mounted obstructions.

Placement of above ground fixtures in the right of way will be governed by the provisions of *AASHTO, Roadside Design Guide (1989)* and *AASHTO "A policy on Geometric Design of Highways and Streets" (1990-Green Book)*.

SECTION VI. LOCATION, FREEWAYS; LONGITUDINAL OCCUPANCY

The placement of underground utilities may be permitted longitudinally within freeway right of way, provided the utility is placed in accordance with these procedures, and the utility owner has received an approved permit and/or written agreement from the department. Above ground appurtenances shall not be allowed within freeway right of way except as stated in these procedures.

The loss of productive agricultural land or any productivity of agricultural land will be evaluated for direct and indirect environmental and economic effects in determining permissible occupancy of utilities longitudinally on freeways.

A. Occupancy shall satisfy all the following conditions:

- (1) The accommodation will not adversely affect traffic safety, design, construction, operation capacity, maintenance, stability or interfere with the present use or future expansion of the freeway.**
- (2) The accommodation shall present no hazard to life, health or property if it fails to function properly, is severed, or otherwise damaged.**
- (3) Only fiber optic cable will be allowed longitudinal on freeways.**
- (4) Service connections to adjacent properties shall not be allowed from within the access control limits.**
- (5) Construction and maintenance activities shall be accomplished without access from through-traffic roadways or ramps. Access can be obtained from a frontage road, rest area parking facility, near-by public road or trail along the right of way.**
 - a. The department may allow maintenance access through a locked gate in the right of way fence or as specified by permit or agreement.**
 - b. The department may allow construction and maintenance access from the mainline roadways or ramps under hardship considerations, if specified in a permit or agreement.**
 - c. The utility shall provide detailed plans on how the proposed facility will be constructed and maintained without access from the through-traffic roadway or ramp.**
- (6) No installation will be allowed longitudinal within the median of a divided highway.**
- (7) No utility facility will be allowed on a structure which carries a freeway roadway or ramp, except as may be specified in a permit. The department may allow facilities on a structure based upon hardship considerations.**
- (8) The utility will provide a detailed plan of its maintenance schedule including both routine and emergency procedures when submitting its permit application.**
- (9) The installation shall be placed on a uniform alignment near the right-of-way line, or as determined by the department, and with a minimum depth of 36 inches.**
 - a. No installation will be allowed within the clear zone of through-traffic roadways or ramps.**

- b. The department reserves the right to waive the minimum depth requirement where rocky terrain creates difficulty in obtaining the desired depth.
 - c. Pull boxes may be installed under the existing ground line. The number and location will be subject to departmental approval.
 - d. Repeater stations will be placed outside the right-of-way fence or access control limits. The department may allow repeater stations near the outside edge of the right-of-way in rest areas if specified in a permit.
- (10) Warning tape will be placed at a minimum depth of 12 inches below the existing ground surface and above the installed facility to help locate the facility in the future.
- (11) The utility shall abide by all traffic control measures as set forth in the permit or agreement.
- (12) Utility sign markers shall be placed by the utility within the right-of-way fence line. Signs shall identify the owner/operator name, Gopher State One telephone number and type of facility buried by the utility.
- a. Utility sign markers shall be placed and maintained at a maximum interval of 1/4 mile by the utility.
 - b. Utility signs shall be appropriately located at each side of all public roads, streets and trails where freeway right-of-way intersects with the right-of-way of these public roads, streets and trails.
- (13) All additional identifiable costs incurred by the department in accommodating existing utility facilities during maintenance operations and reconstruction projects will be charged to the utility. These costs include but are not limited to the following:
- a. Design
 - 1. Data collection.
 - 2. Determination of the different phases of the reconstruction project.
 - b. Reconstruction
 - 1. Cost to work around utility.
 - 2. Delays caused by utility inability to move their facility.
 - 3. Construction claims due to delays.
 - 4. Utility claims due to loss of revenue caused by interruption of service.

c) Maintenance

Delays in maintenance due to utility failure to locate their facilities.

- (14) The utility shall indemnify and hold harmless the department and all of its agents and employees from any and all claims, demands, actions or causes of action of whatsoever nature or character arising out of or by reason of permit or work done or the continuing presence of the utility by virtue of this permit and or agreement. The utility provided for herein agrees to defend at its own sole cost and expense any action or proceeding commenced for the purpose of asserting any claim of whatsoever character arising hereunder by virtue of the execution, performance, or non-performance of the work to be performed by the utility as provided by the permit and or agreement. The utility shall pay all costs related to service interruptions or damage to their facilities caused by the department's contractor or employees due to highway operations.**
- (15) The utility agrees to waive all future claims, if any, to relocation costs caused by maintenance or reconstruction of the transportation system requiring relocation of their facilities.**
- (16) Violation of any conditions of the permit or agreement in any of the above conditions may be cause for the department to revoke the permit or agreement.**

B. Multi-Duct System

- (1) The department reserves the right to require installations to be placed in a multi-duct system consisting of two or more inner ducts. The installation details are subject to the approval of the department.**
 - a. The department may designate the first utility company requesting occupancy as the "lead utility". The lead utility shall be responsible for the following:**
 - 1. Design and construction of the multi-duct system.**
 - 2. Maintaining the inner duct occupied by the lead utility.**
 - 3. Providing all capital required to construct the multi-duct system.**
 - b. The department may discount annual fees of the lead utility until the utility has recovered all or an agreed upon portion of the cost of placing the multi-duct system.**
 - c. All of the inner ducts within the duct system will be owned by the department except those occupied by the lead utility and/or other utilities which have permits and/or agreement with the department.**

- d. All subsequent requests for longitudinal occupancy will require the installation to be placed within one of the inner ducts of the established multi-duct system if there are inner ducts unoccupied.
- e. Subsequent occupants will purchase their share of the conduit system by payment to the department of a proportionate share of the original cost of the multi-duct system. The amount will be determined by the department.
- f. The department reserves the right to require one inner duct of a multi-duct system to be reserved for government use.
- g. No utility will be allowed to assign or transfer ownership of their inner duct of the multi-duct system to another party without departmental approval.
- h. The department may revoke its approval to use an inner duct of a multi-duct system if not occupied or placed in service by the utility within six months after receiving approval from the department.
- i. Any utility having a fiber optic cable within an inner duct of a multi-duct system shall become owner of that inner duct.

C. Prior to starting any work on the freeway right of way the utility shall have:

(1) Paid all required fees to the department.

- a. Annual fees shall be assigned based on the location of the occupancy as follows:

Urban sections: An annual fee of \$5,000 per mile of occupancy, or a minimum fee of \$10,000 per installation, whichever is greater.

Rural sections: An annual fee of \$1,600 per mile of occupancy or a minimum of \$8,000 per installation whichever is greater.

The department reserves the right to add locations to the approved routes as existing highways are changed to freeway standards, and as new census data is received. See *Appendix A, Metro Freeway Locations*, and *Appendix B, Rural Area Freeway Locations*.

- b. Established fees will be reviewed by the department for adjustment every fifth year from the effective date of these procedures.

(2) Placed a performance bond with the department, in an amount determined by the department, to guarantee prompt restoration of any damages caused during the installation of a facility.

- (3) **Certify through appropriate documentation that the utility has and will maintain an appropriate type and amount of insurance coverage, as specified in the permit.**
 - (4) **Received an approved permit and/or agreement from the department. Permits or agreements shall be negotiated for periods of up to 20 years and may be extended at the department's discretion.**
- D. **The department may allow utilities on freeways longitudinally, if the proposed occupancy conforms with the AASHTO policy "*A Policy on the Accommodation of Utilities Within Freeway Right-of-Way*" and U.S. Code, Title 23, Part 645.209(c).**

SECTION VII. LIGHTING AND OTHER ABOVE GROUND STRUCTURES.

Any above ground lighting facility, lighting fixture supports or other above ground structures, must be located outside of the clear roadside policy area (clear zone), except under conditions in items A thru D below, or where the right of way width limits are less than the clear roadside policy requires and it is not cost effective to do otherwise.

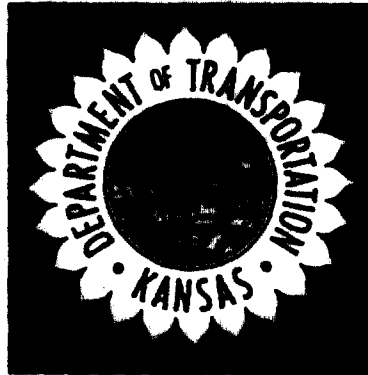
- A. **Light poles must conform with breakaway design features as defined in the most current revision of the 1985 AASHTO, *Standard Specifications for Structural Support*.**
- B. **Any substantial remains of structures, or bases, must protrude less than 4 inches above the surface of the natural ground, and be maintained at that level. This requirement is in the most current revision of the 1985 AASHTO *Standard Specifications for Structural Support*.**
- C. **The installation is in an area where the posted speed limit is 40 miles per hour or less.**
 - (1.) **Curbed areas: 2 feet min. behind face of curb.**
 - (2.) **Other: 10 feet from roadway.**
- D. **The facility is protected by a guardrail or is located in a protected area.**

SECTION VIII. UTILITIES ON HIGHWAY BRIDGE STRUCTURES

Utility installations on highway structures are allowed by utility permit or may be provided for by agreement when installed in conjunction with highway construction. Such installations must be approved by the Minnesota Department of Transportation, Office of Bridges and Structures before construction of the utilities' facility may begin.

The utility is responsible for the design of its facility, subject to State approval. Factors influencing the design of an installation are the effects on traffic flow, structural integrity of highway structures, ease of highway and utility maintenance, and appearance of the installation.

EXHIBIT 8



Kansas
Department of Transportation
Solicitation for
Fiber Optic Infrastructure System
Project Number 106 K-6454-01

October 30, 1997

Prepared by HNTB Corporation

Kansas Department of Transportation

Fiber Optic Infrastructure System

Table of Contents

Section	Page
1. Contract Scope.....	1
1.1. Introduction.....	1
1.2. Project Area	2
1.3. Project Goals.....	3
1.4. Background.....	4
1.5. Definitions.....	5
2. Project Requirements.....	8
2.1. General.....	8
2.1.1. Highway Use Permit Required	9
2.2. Project Plan and Schedule.....	10
2.3. Inquiries	11
2.3.1. General	11
2.3.2. Requests for Clarification	11
2.3.3. Project Updates and Revisions	12
2.4. Preparation of Response	12
2.4.1. Determination of Non-Responsiveness	13
2.5. Project Response Format and Content	14
2.5.1. Contractor Qualifications and Requirements.....	14
2.5.1.1. General	14
2.5.1.2. Letter of Transmittal	14
2.5.1.3. EEO Requirements.....	14
2.5.1.4. Certification	15
2.5.1.5. Bid Bonds.....	15
2.5.1.6. Contract Bond.....	15
2.5.1.7. Insurance	15
2.5.1.8. License.....	15
2.5.1.9. Bid Format.....	16
2.5.2. Submission Requirements.....	16

Kansas Department of Transportation

Fiber Optic Infrastructure System

Table of Contents

Section	Page
2.5.2.1. General	16
2.5.2.2. Component I: Management and Technical Team	17
2.5.2.3. Component II: Technical Approach.....	20
2.5.2.4. Component III: Contractor Offer for Services	20
2.5.2.5. Component IV: Schedule	21
2.5.2.6. Component V: Dollars	21
2.6. Reservations by KDOT.....	23
2.6.1. Conflicts	23
2.6.2. Award and Modification.....	23
2.6.3. Liquidated Damages.....	23
2.6.4. Cancellation and Deferment.....	24
2.6.4.1. General	24
2.6.4.2. Deferment	25
2.6.4.3. Cancellation	25
2.7. Terms and Conditions.....	25
2.7.1. General	25
2.7.2. Contract Length and Termination.....	26
2.7.3. Breach of Contract.....	26
2.7.4. Bankruptcy	27
2.7.5. Termination	28
2.7.6. KDOT's Obligations	29
2.7.7. Intellectual Property Rights.....	29
2.7.8. Federal, State and Local Regulations.....	29
2.7.9. Documents Incorporated into the Final Agreement.....	30
2.8. Evaluation of Bids	30
2.8.1. General	30
2.8.2. Evaluation Guidelines.....	30
2.8.3. Lowest Responsible Bidder	31
3. Project Management.....	32